RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/791,373_

Source: _____

Date Processed by STIC: _____

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RAW SEQUENCE LISTING   DATE: 04/20/2005
PATENT APPLICATION: US/10/791,373 TIME: 10:55:43

Input Set : **N:\Crf3\RULE60\10791373.raw.txt**
Output Set: **N:\CRF4\04202005\J791373.raw**

SEQUENCE LISTING

3	(1)	GENERAL INFORMATION:
5		(i) APPLICANT: Chee, Mark S.
6		Wang, Chunwei
7		Jevons, Luis C.
8		Bernhart, Derek H.
9		Lipshutz, Robert J.
11		(ii) TITLE OF INVENTION: Computer-Aided Visualization and
12		Analysis System for Sequence Evaluation
14		(iii) NUMBER OF SEQUENCES: 39
16		(iv) CORRESPONDENCE ADDRESS:
17		(A) ADDRESSEE: Townsend and Townsend and Crew LLP
18		(B) STREET: Two Embarcadero Center, 8th Floor
19		(C) CITY: San Francisco
20		(D) STATE: California
21.		(E) COUNTRY: USA
22		(F) ZIP: 94111-3834
24		(v) COMPUTER READABLE FORM:
25		(A) MEDIUM TYPE: Floppy disk
26		(B) COMPUTER: IBM PC compatible
27		(C) OPERATING SYSTEM: PC-DOS/MS-DOS
28		(D) SOFTWARE: PatentIn Release #1.0, Version #1.25
30		(vi) CURRENT APPLICATION DATA:

C--> 31   **(A) APPLICATION NUMBER: US/10/791,373**
C--> 32   **(B) FILING DATE: 01-Mar-2004**
W--> 38   **(C) CLASSIFICATION: 435**

35		(vii) PRIOR APPLICATION DATA:
36		(A) APPLICATION NUMBER: US/08/327,525
37		(B) FILING DATE: October 21, 1994
40		(viii) ATTORNEY/AGENT INFORMATION:
41		(A) NAME: Norviel, Vernon A.
42		(B) REGISTRATION NUMBER: 32,483
43		(C) REFERENCE/DOCKET NUMBER: 16528X-82
45		(ix) TELECOMMUNICATION INFORMATION:
46		(A) TELEPHONE: 415-326-2400
47		(B) TELEFAX: 415-326-2422
50	(2)	INFORMATION FOR SEQ ID NO: 1:
52		(i) SEQUENCE CHARACTERISTICS:
53		(A) LENGTH: 15 base pairs
54		(B) TYPE: nucleic acid
55		(C) STRANDEDNESS: single
56		(D) TOPOLOGY: linear

W--> 58   **(ii) MOLECULE TYPE: DNA (oligonucleotide)**

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```
 62      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
 64 ATGTGGACAG TTGTA                                          15
 66 (2) INFORMATION FOR SEQ ID NO: 2:
 68      (i) SEQUENCE CHARACTERISTICS:
 69          (A) LENGTH: 15 base pairs
 70          (B) TYPE: nucleic acid
 71          (C) STRANDEDNESS: single
 72          (D) TOPOLOGY: linear
W--> 74     (ii) MOLECULE TYPE: DNA (oligonucleotide)
 78      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 80 ATGTGGATAG TTGTA                                          15
 82 (2) INFORMATION FOR SEQ ID NO: 3:
 84      (i) SEQUENCE CHARACTERISTICS:
 85          (A) LENGTH: 15 base pairs
 86          (B) TYPE: nucleic acid
 87          (C) STRANDEDNESS: single
 88          (D) TOPOLOGY: linear
W--> 90     (ii) MOLECULE TYPE: DNA (oligonucleotide)
 94      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
 96 ATGTGGAKAG TTGTA                                          15
 98 (2) INFORMATION FOR SEQ ID NO: 4:
100      (i) SEQUENCE CHARACTERISTICS:
101          (A) LENGTH: 11 base pairs
102          (B) TYPE: nucleic acid
103          (C) STRANDEDNESS: single
104          (D) TOPOLOGY: linear
W--> 106    (ii) MOLECULE TYPE: DNA (oligonucleotide)
110      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
112 AAAACTGAAA A                                              11
114 (2) INFORMATION FOR SEQ ID NO: 5:
116      (i) SEQUENCE CHARACTERISTICS:
117          (A) LENGTH: 11 base pairs
118          (B) TYPE: nucleic acid
119          (C) STRANDEDNESS: single
120          (D) TOPOLOGY: linear
W--> 122    (ii) MOLECULE TYPE: DNA (oligonucleotide)
126      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
128 AAAACCGAAA A                                              11
130 (2) INFORMATION FOR SEQ ID NO: 6:
132      (i) SEQUENCE CHARACTERISTICS:
133          (A) LENGTH: 17 base pairs
134          (B) TYPE: nucleic acid
135          (C) STRANDEDNESS: single
136          (D) TOPOLOGY: linear
W--> 138    (ii) MOLECULE TYPE: DNA (oligonucleotide)
142      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
144 AAACCCAATC CACATCA                                        17
146 (2) INFORMATION FOR SEQ ID NO: 7:
148      (i) SEQUENCE CHARACTERISTICS:
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Input Set : N:\Crf3\RULE60\10791373.raw.txt
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        149             (A) LENGTH: 17 base pairs
        150             (B) TYPE: nucleic acid
        151             (C) STRANDEDNESS: single
        152             (D) TOPOLOGY: linear
W--> 154     (ii) MOLECULE TYPE: DNA (oligonucleotide)
        158        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
        160 AAACCCAGTC CACATCA                                                    17
        162 (2) INFORMATION FOR SEQ ID NO: 8:
        164        (i) SEQUENCE CHARACTERISTICS:
        165             (A) LENGTH: 31 base pairs
        166             (B) TYPE: nucleic acid
        167             (C) STRANDEDNESS: single
        168             (D) TOPOLOGY: linear
W--> 170     (ii) MOLECULE TYPE: DNA (oligonucleotide)
        174        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
        176 GGGGAAGCAG ATTTGGGTAC CACCCAAGTA T                                     31
        178 (2) INFORMATION FOR SEQ ID NO: 9:
        180        (i) SEQUENCE CHARACTERISTICS:
        181             (A) LENGTH: 31 base pairs
        182             (B) TYPE: nucleic acid
        183             (C) STRANDEDNESS: single
        184             (D) TOPOLOGY: linear
W--> 186     (ii) MOLECULE TYPE: DNA (oligonucleotide)
        190        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
        192 GGGGAAGCAG ATTTGAAMAC CACCCAAGTA T                                     31
        194 (2) INFORMATION FOR SEQ ID NO: 10:
        196        (i) SEQUENCE CHARACTERISTICS:
        197             (A) LENGTH: 59 base pairs
        198             (B) TYPE: nucleic acid
        199             (C) STRANDEDNESS: single
        200             (D) TOPOLOGY: linear
W--> 202     (ii) MOLECULE TYPE: DNA (oligonucleotide)
        206        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
        208 GCATTAGTAG AGATATGTAC AGAAATGGAA AAGGAAGGGA AAATTTCAAA AATTGGGCC        59
        210 (2) INFORMATION FOR SEQ ID NO: 11:
        212        (i) SEQUENCE CHARACTERISTICS:
        213             (A) LENGTH: 59 base pairs
        214             (B) TYPE: nucleic acid
        215             (C) STRANDEDNESS: single
        216             (D) TOPOLOGY: linear
W--> 218     (ii) MOLECULE TYPE: DNA (oligonucleotide)
        222        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
        224 GCATTAGTAG AAATTTGTAC AGAGATGGAA AAGGAAGGGA AAATTTCAAA AATTGGGCC        59
        226 (2) INFORMATION FOR SEQ ID NO: 12:
        228        (i) SEQUENCE CHARACTERISTICS:
        229             (A) LENGTH: 59 base pairs
        230             (B) TYPE: nucleic acid
        231             (C) STRANDEDNESS: single
        232             (D) TOPOLOGY: linear
```

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Input Set : N:\Crf3\RULE60\10791373.raw.txt
Output Set: N:\CRF4\04202005\J791373.raw

```
W--> 234       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     238       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
     240 GCATTAGTAG AGATATGGAG AGRARDGGRA ANNNAAGGGA AAAATTNNNAA AATTGGGCC          59
     242 (2) INFORMATION FOR SEQ ID NO: 13:
     244       (i) SEQUENCE CHARACTERISTICS:
     245           (A) LENGTH: 59 base pairs
     246           (B) TYPE: nucleic acid
     247           (C) STRANDEDNESS: single
     248           (D) TOPOLOGY: linear
W--> 250       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     254       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
     256 GCATTAGTAG AGATATGKAS AGRARDGGRA ANNNAAGGGA AAAKTNNNAA AATTGGGCC          59
     259 (2) INFORMATION FOR SEQ ID NO: 14:
     261       (i) SEQUENCE CHARACTERISTICS:
     262           (A) LENGTH: 59 base pairs
     263           (B) TYPE: nucleic acid
     264           (C) STRANDEDNESS: single
     265           (D) TOPOLOGY: linear
W--> 267       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     271       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
     273 GCATTAGTAG AGATATGKAS AGRRRDGGRA ANNNAAGGGA AAADTYNNAA AATTGGGCC          59
     275 (2) INFORMATION FOR SEQ ID NO: 15:
     277       (i) SEQUENCE CHARACTERISTICS:
     278           (A) LENGTH: 59 base pairs
     279           (B) TYPE: nucleic acid
     280           (C) STRANDEDNESS: single
     281           (D) TOPOLOGY: linear
W--> 283       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     287       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
     289 GCATTAGTAG AGATATGTAS AGRRADGGAA ANGGAAGGGA AAAATTNNNNA AATTGGGCC          59
     291 (2) INFORMATION FOR SEQ ID NO: 16:
     293       (i) SEQUENCE CHARACTERISTICS:
     294           (A) LENGTH: 59 base pairs
     295           (B) TYPE: nucleic acid
     296           (C) STRANDEDNESS: single
     297           (D) TOPOLOGY: linear
W--> 299       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     303       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
     305 GCATTAGTAG AGATATGTAC AGRGAGGGAA ANGGAAGGGA AAAATTNNNNA AATTGGGCC          59
     307 (2) INFORMATION FOR SEQ ID NO: 17:
     309       (i) SEQUENCE CHARACTERISTICS:
     310           (A) LENGTH: 59 base pairs
     311           (B) TYPE: nucleic acid
     312           (C) STRANDEDNESS: single
     313           (D) TOPOLOGY: linear
W--> 315       (ii) MOLECULE TYPE: DNA (oligonucleotide)
     319       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
     321 GCATTAGTAG AGATATGTAS AGRGAGGGAA ANGGAAGGGA AAAATTNNNNA AATTGGGCC          59
     323 (2) INFORMATION FOR SEQ ID NO: 18:
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RAW SEQUENCE LISTING   DATE: 04/20/2005
PATENT APPLICATION: US/10/791,373   TIME: 10:55:43

Input Set : N:\Crf3\RULE60\10791373.raw.txt
Output Set: N:\CRF4\04202005\J791373.raw

```
       325        (i) SEQUENCE CHARACTERISTICS:
       326            (A) LENGTH: 59 base pairs
       327            (B) TYPE: nucleic acid
       328            (C) STRANDEDNESS: single
       329            (D) TOPOLOGY: linear
W--> 331        (ii) MOLECULE TYPE: DNA (oligonucleotide)
       335       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
       337 GCATTAGTAG GAGGNNNGAC AGGGRKGGAA ANNMAAGGGA AAAKTNNNAA AATTGGGCC          59
       339 (2) INFORMATION FOR SEQ ID NO: 19:
       341        (i) SEQUENCE CHARACTERISTICS:
       342            (A) LENGTH: 160 base pairs
       343            (B) TYPE: nucleic acid
       344            (C) STRANDEDNESS: single
       345            (D) TOPOLOGY: linear
W--> 347        (ii) MOLECULE TYPE: DNA (oligonucleotide)
       351       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
       353 TCGAGATAAT CTATGTCCTC GTCTACTATG TCATAATCTT CTTTACTTAA ACGGTCCTTT         60
       355 TACCTTTGGT TTTTACTATC CCCCTTAACC TCCAAAATAG TTTCATTCTG TCATGCTAGT        120
       357 CTATGGACAT CTTTAGACAC CTGTATTTCG ATATCCATGT                             160
       359 (2) INFORMATION FOR SEQ ID NO: 20:
       361        (i) SEQUENCE CHARACTERISTICS:
       362            (A) LENGTH: 160 base pairs
       363            (B) TYPE: nucleic acid
       364            (C) STRANDEDNESS: single
       365            (D) TOPOLOGY: linear
W--> 367        (ii) MOLECULE TYPE: DNA (oligonucleotide)
       371       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
       373 NNGAGATANN NTATGTCCTC GTCYACTATG TNANNNNNNN NNNNNNNNAA ACGGTCCTNN         60
       375 NNNNNNNNNN NNNNNNNNNN CNNCNTAACC TCCAAAATAN NNNNNNTCTN NNNNANNNNT        120
       377 CTANNNGNAG NNNNAGANAR NCCNNNNNNN NNATNCATGT                             160
       379 (2) INFORMATION FOR SEQ ID NO: 21:
       381        (i) SEQUENCE CHARACTERISTICS:
       382            (A) LENGTH: 160 base pairs
       383            (B) TYPE: nucleic acid
       384            (C) STRANDEDNESS: single
       385            (D) TOPOLOGY: linear
W--> 387        (ii) MOLECULE TYPE: DNA (oligonucleotide)
       391       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
       393 TCGAGATAAT CTATGTCCTC GTCTACTATG TCATAATNNN NNNNACTTAA ACGGTCCTTT         60
       395 TACCTTTGGT TTTTACTATC CCCCTTAACC TCCAAAATAG TTTCATTCTG NCATANNAGT        120
       397 CTATGNGNNG NNNTAGACAG NCCNNNNTCG ATATCCATGT                             160
       399 (2) INFORMATION FOR SEQ ID NO: 22:
       401        (i) SEQUENCE CHARACTERISTICS:
       402            (A) LENGTH: 160 base pairs
       403            (B) TYPE: nucleic acid
       404            (C) STRANDEDNESS: single
       405            (D) TOPOLOGY: linear
W--> 407        (ii) MOLECULE TYPE: DNA (oligonucleotide)
       411       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
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VERIFICATION SUMMARY   DATE: 04/20/2005
PATENT APPLICATION: US/10/791,373   TIME: 10:55:44

Input Set : **N:\Crf3\RULE60\10791373.raw.txt**
Output Set: **N:\CRF4\04202005\J791373.raw**

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L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:38 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:58 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:74 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:90 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:106 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:122 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:138 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:154 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:170 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:186 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:202 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:218 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:234 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:250 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:267 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:283 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:299 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:315 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:331 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18
L:347 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:367 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20
L:387 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=21
L:407 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22
L:427 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23
L:447 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24
L:467 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25
L:487 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26
L:507 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27
L:527 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:543 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29
L:559 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30
L:575 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:591 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:607 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33
L:623 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:639 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35
L:655 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36
L:671 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37
L:687 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=38
L:703 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39
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